

Lab Center – Hands-On Lab

Session 2198

Build Low-Code Business Automation Apps with
IBM Cloud Pak for Automation



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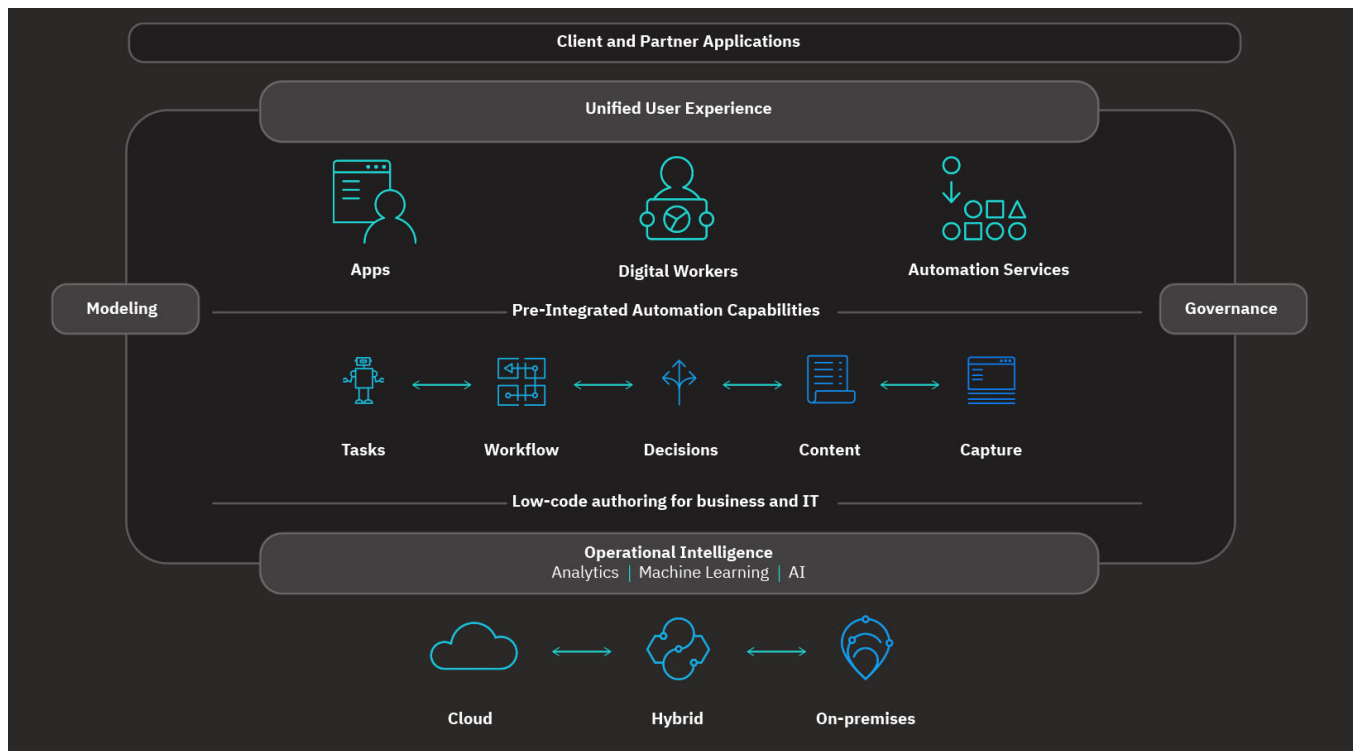
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1 Introduction

Welcome to Cloud Pak for Automation!

Increase productivity, resiliency, scalability with low-code design tools and solutions infused with AI.



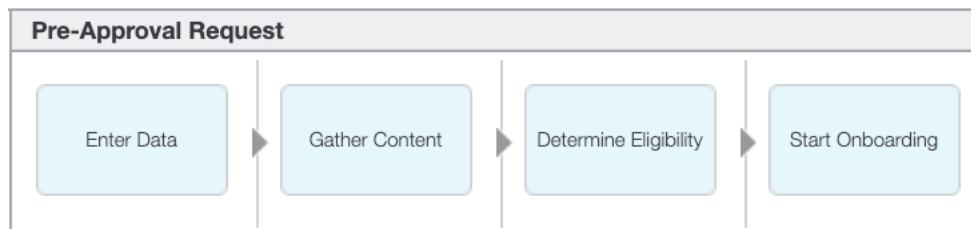
In this lab you will experience **Business Automation Studio** (or Studio for short), the single authoring and development environment for Cloud Pak for Automation. Studio is designed so everyone can author applications with low-code tools and extend automation business services with toolkits. You will use Studio to connect four integrated Cloud Pak for Automation capabilities:

- **Application Designer:** a low-code application designer for business users to create business applications (apps) that use the platform's capabilities.
- **Business Automation Workflow (BAW):** automation and orchestration of multiple business processes — straight-through, human-assisted or case management — to provide visibility into each step.
- **Operational Decision Manager (ODM):** business rule-based decisions to remove manual work from processes to improve business agility and increase IT scale.
- **FileNet Content Manager:** collect, govern, manage and enrich enterprise content throughout your business application.

1.1 Business Scenario

The app you will build is for request approval before launching a core onboarding business process. This app will ease exceptions that occur during the onboarding process by validating requests early before they are submitted downstream. Additionally, creating this app is easier for the business users and does not require any modification to core onboarding business process which may be scheduled later based on development availability.

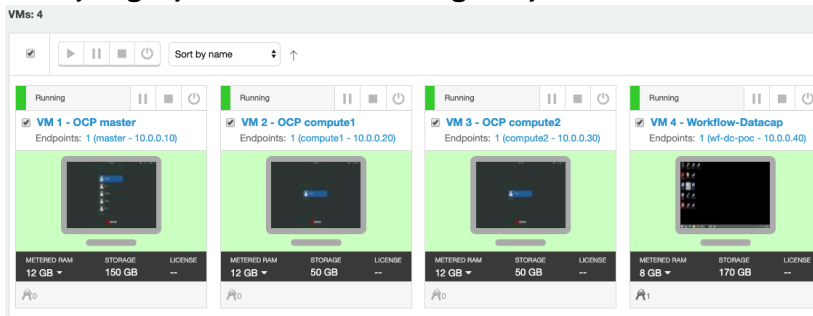
The user will enter data, gather content (stored in the enterprise content repository), determine eligibility (using an existing decision model powered by business rules) and optionally launch the relevant core onboarding process (running in the enterprise business process management system). Below is a milestone diagram from [IBM Blueworks Live](#) that depicts the steps of your app.



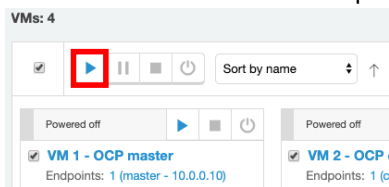
2 Validate lab environment

First, we need to validate the lab environment started successfully.

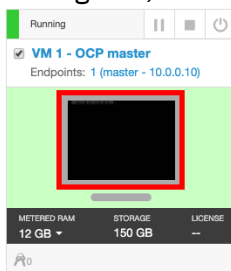
1. Once you get your environment assigned, you will reach a screen similar to the following:



2. Ensure that all VMs are in a Running state with green indicators as above. If not, click the top Play button to start all VMs in sequence.



3. Once green, click on the screen of **VM 1 – OCP master** to open a new browser tab/window.



4. Press SPACE (or click and drag the bottom of the screen to the top) and then click **Not Listed?** and login with **root / passw0rd**.



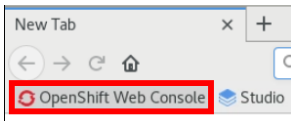
5. It is recommended to fit the desktop to your monitor using the toolbar at the top, click the button outlined in red below:



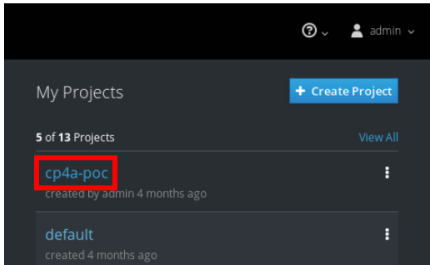
6. Double-click to open a **Firefox** browser.



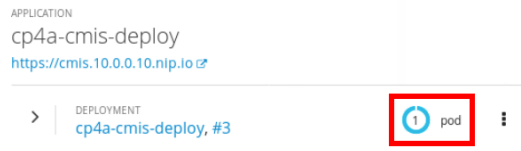
7. On the bookmark bar, open **OpenShift Web Console** and login with **admin / passw0rd**.



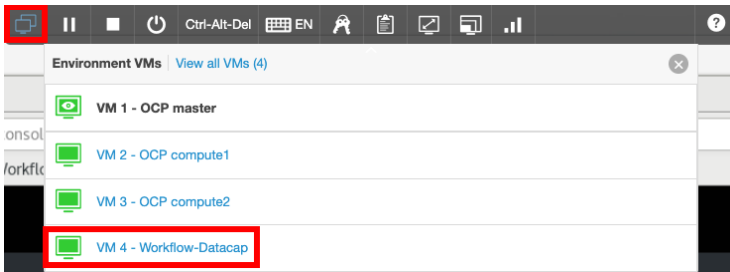
8. On the right, click to open the **cp4a-poc** project.



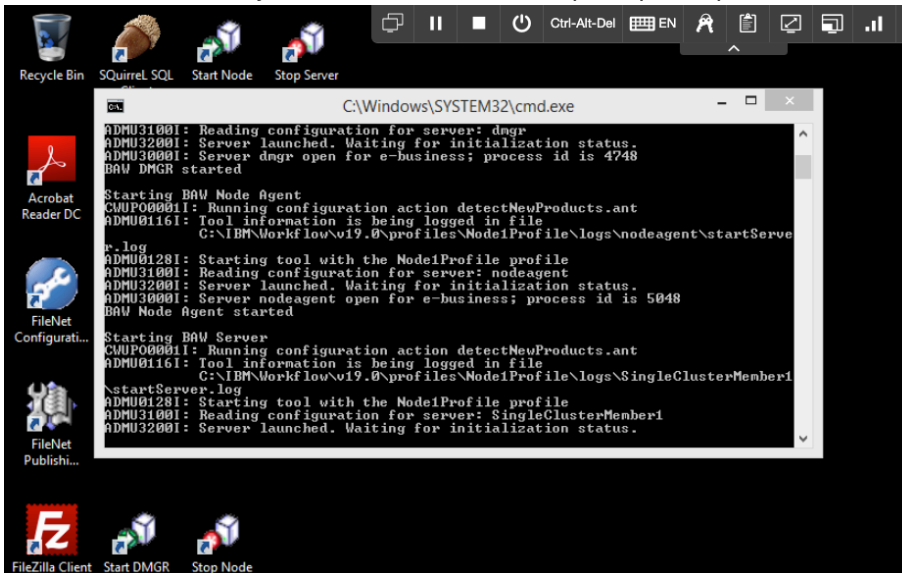
9. On the Overview tab, scroll and confirm that all pods are ready with a solid, bright blue circle around a number 1 or greater.



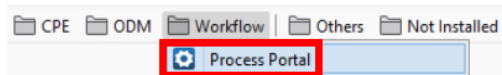
10. Click the arrow to open the top Skytap menu bar open and select the left most button to open a list of all VMs, then click **VM 4 – Workflow**.



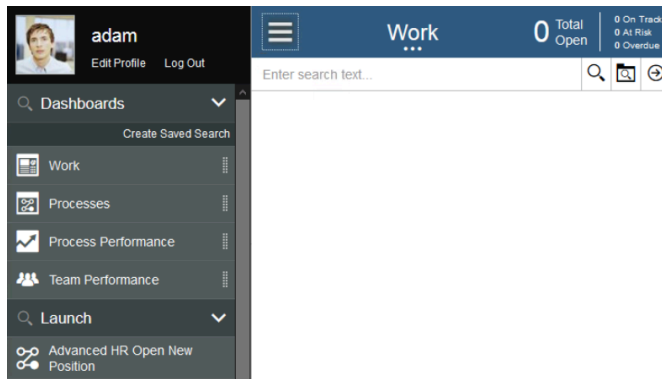
11. Confirm there is no command prompt on the screen which indicates the Workflow server has started automatically. If there is a command prompt (as pictured below), wait for it to disappear.



12. From the bottom Windows taskbar, open a **Firefox** browser and on the bookmark bar, open **Workflow -> Process Portal**.



13. Login with **adam** / **passw0rd** and you should see an empty Process Portal. Note, the first time the server starts, this may take some time (even a minute or more) to fully load the page as depicted below.



Congratulations, your lab environment is started successfully! You may choose to use either VM 4 if you are comfortable with Windows or go back to VM 1 if you prefer Red Hat Enterprise Linux.

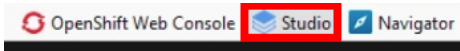
3 Tour Studio and Application Designer

Let's start our lab with a tour of Studio and Application Designer, then we will create our business app from scratch!

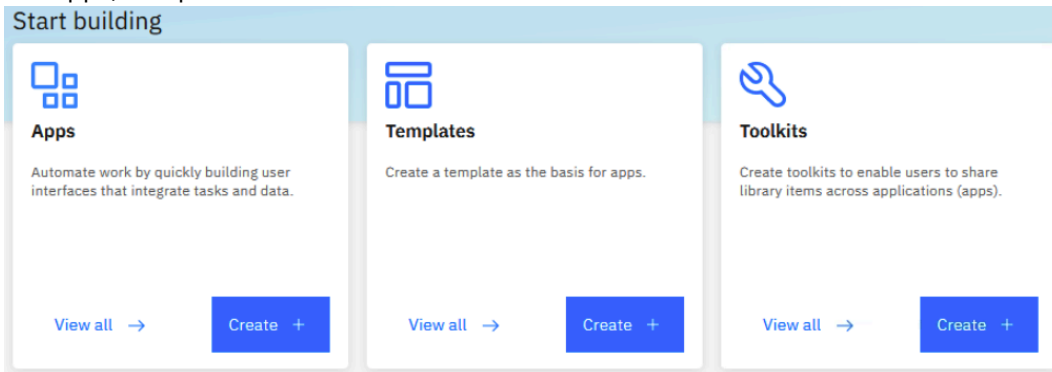
3.1 Tour Business Automation Studio

Now, let's take a look at the Business Automation Studio interface, the single authoring and development environment for Cloud Pak for Automation and the entry point to various designers to help you reach your goals.

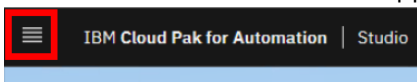
1. If you do not have Firefox still open, start it now.
2. On the bookmark bar, click **Studio** to open the Studio environment.



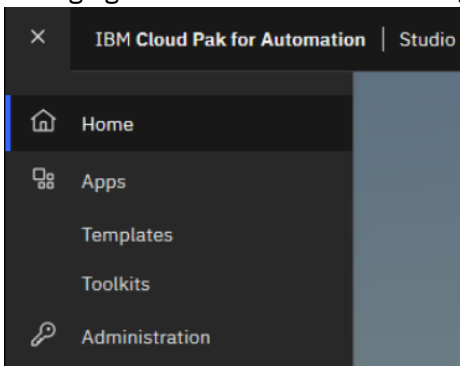
3. If not already logging in to another Cloud Pak for Automation interface, login with **adam / passw0rd**.
4. The Studio home page provides access to all capabilities currently available. For this lab, scroll down to see Apps, Templates and Toolkits.



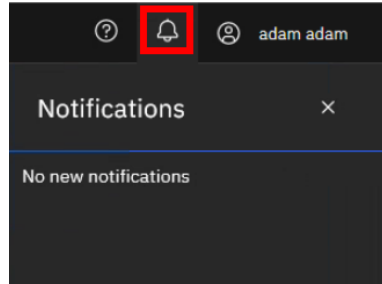
5. Click the three-bar menu at the upper-left.



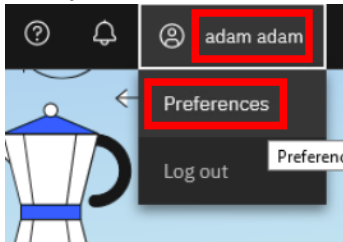
6. See the same capabilities as well as a Home screen link and the Studio's Administration page for managing access and additional settings.



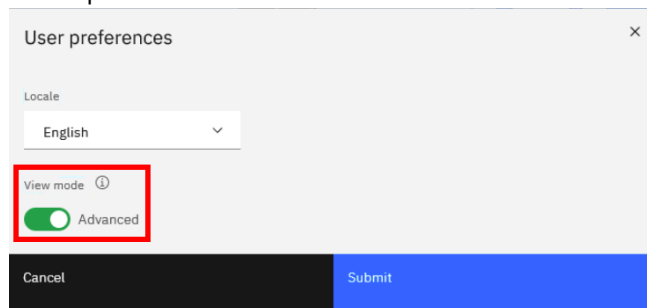
- Click the notification bell at the upper-right to expand the area for notifications such as new deployments. None are listed now.



- Finally, click the name **adam** at the upper-right and click **Preferences**.



- We already know that adam is a Studio Administrator (as we saw Administration in the left side menu). Here, we see adam's preferences is set to Advanced. This means that they see additional capabilities in Studio such as Toolkits that are reserved for advanced users including technical analysts and developers.

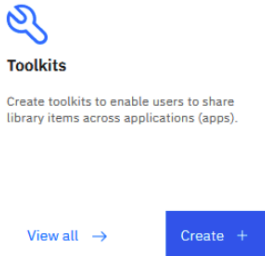


- Make sure to keep adam's preferences set to **Advanced** as above and click **Submit**.

3.2 Review Toolkits

First, as adam, we will review the toolkits provided by developers in our organization. Later, we will take on the role of a business user app assembler who is responsible for using these toolkits and the artifacts they contain to assemble an app.

1. Scroll to the bottom of the home page and click the **Toolkits** tile. If you click Create by accident, just click Cancel and try again.

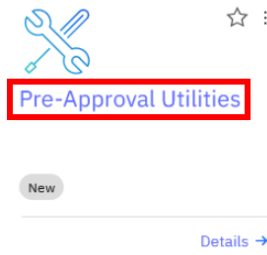


This is a list of all the toolkits in Studio. There are three types of toolkits:

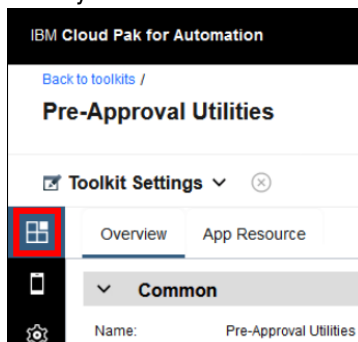
- a. System toolkits: provided with the base Studio and contain the basic building blocks for apps. These include System Data and UI Toolkit.
- b. Services toolkits: provided by IBM and include reusable components that you can use in your apps as a low-code way to leverage various Cloud Pak for Automation capabilities. These include Content Services (for FileNet), Decisions (for ODM) and Workflow Services (for BAW).
- c. App toolkits: created by Studio authors, these include more reusable components that are specific to the business. They may encapsulate components from the above toolkits to make them easier to use for app assemblers.

Remember, these toolkits are created by Advanced users such as developers.

2. Click **Pre-Approval Utilities** to open this app toolkit created for our lab today.

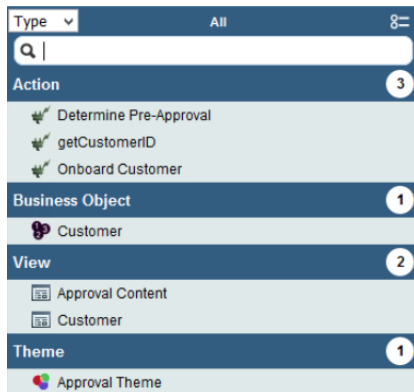


3. Move your mouse to the left side and click the top icon to open a list of all the artifacts in the toolkits.

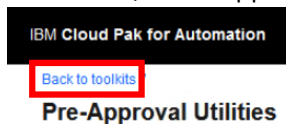


4. You see the following:
 - a. Actions: three actions that leverage various services in the platform to get IDs, make decisions (using ODM) and launch processes (using BAW).

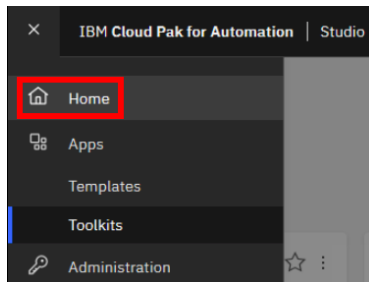
- b. Business Objects: one object that contains all data for the customer.
- c. Views: views for content management and the customer object to ensure UX consistency.
- d. Theme: a set of colors and fonts and allow for a consistent theme throughout our app.



- 5. If you wish, you can click any of these artifacts to explore them more. Do not edit them but feel free to review.
- 6. Once done, in the upper-left corner, click **Back to toolkits** to return to the Studio toolkit list.



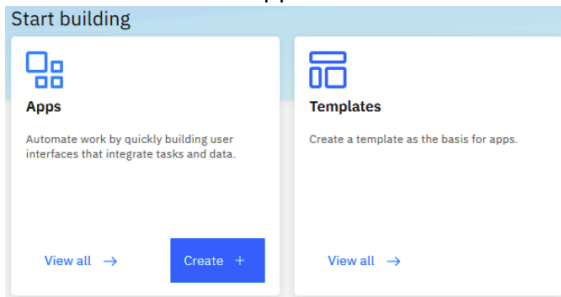
- 7. Click the three-bar menu at the upper-left and click **Home**.



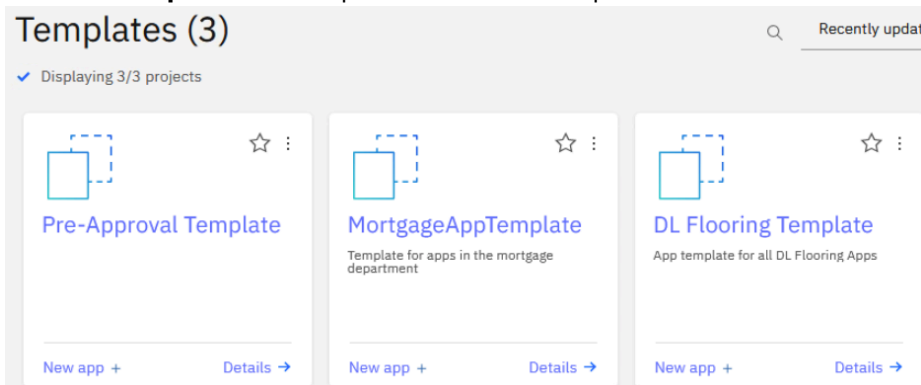
3.3 Review Templates

You have now reviewed the toolkits available from the development team. Let's change to a business user and take on the role of an app assembler.

1. At the upper-right, click **adam** and then click **Log out**.
2. Login as **alice** / **passw0rd**.
3. Scroll down and notice that Alice only has access to create Apps and use (but not create) Templates. This is the role of an app assembler

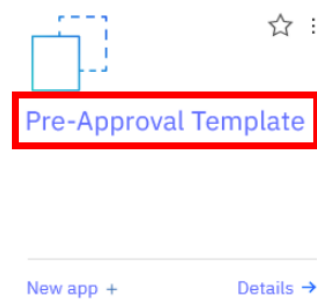


4. Click the **Templates** tile to open the list of all templates in Studio.

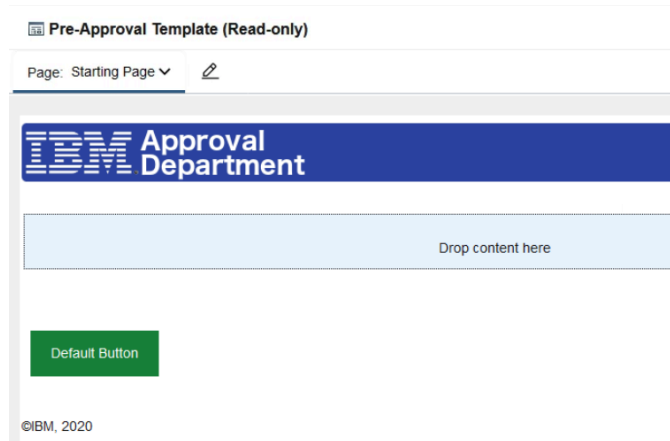


Templates are a predefined starting point that you can use to create an app and typically represent a common-use case pattern. In this case, approval.

5. Click **Pre-Approval Template** to open and review the template before we use it. If you click New app by accident, just click Cancel and try again.



6. You see the Starting Page format including a header, footer, content box and button and you can add your own views once you create an app from this template.



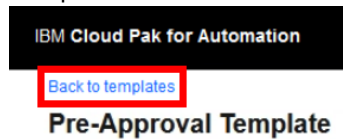
Looks good, time to create our business app!

4 Create Business Application

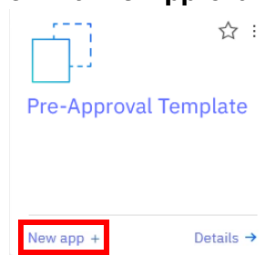
Now that we know what resources are available to us as an app assembler, it is time to create our business app.

4.1 Create Starting Page and Preview

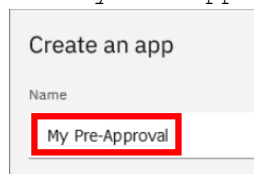
1. If you are still looking at the Pre-Approval Template, in the upper-left, click **Back to templates** to return to the Studio template list. If you are in Studio, make sure you click the menu at the upper-left and click Templates.



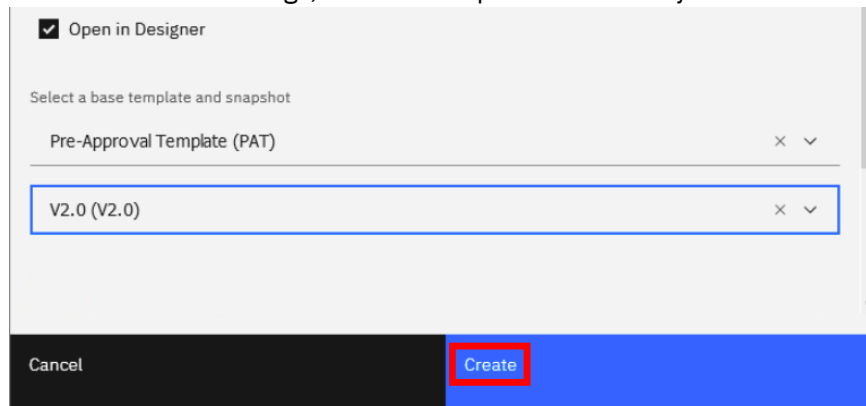
2. On the **Pre-Approval Template** tile, click the **New app +** link to create a new app from the template.



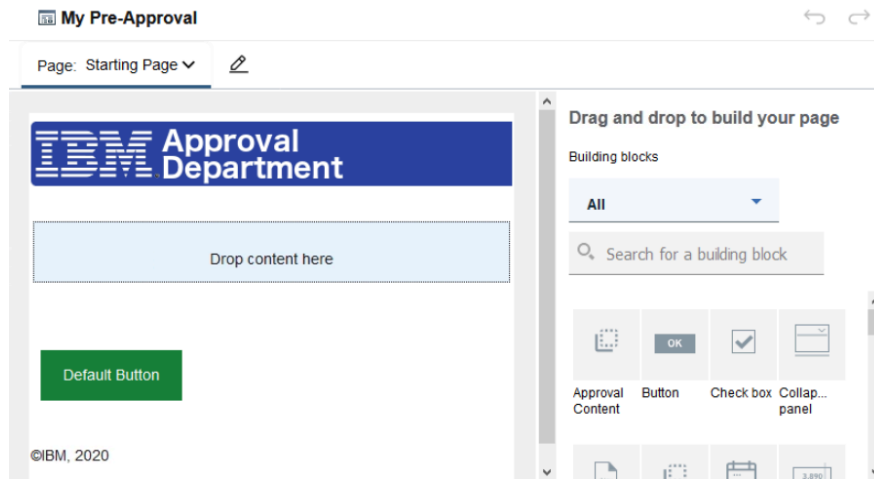
3. Enter **My Pre-Approval** for the name.



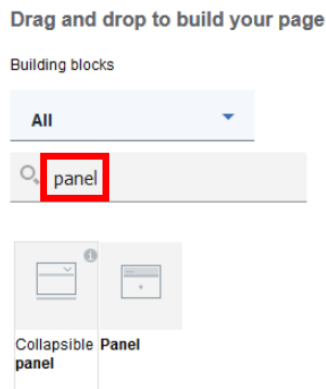
4. Review the other settings, note the template version may not be the same as below, and click **Create**.



- You are presented with the default starting page (from the template) and are now ready to assemble your business app by dragging views from the palette on the right to the page editor on the left.



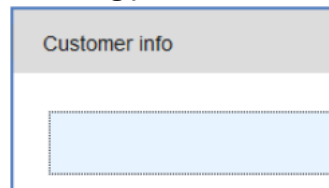
- On the right side, search for panel.



- Click and drag the **Collapsible panel** from the right side into the content box on the left side.



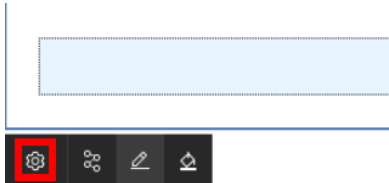
- Assuming you did not click elsewhere yet, type `Customer info` as the name of your collapsible panel.



If the name is not highlighted, click the collapsible panel and then click the pencil icon that appears at the bottom left of the panel to edit the name.

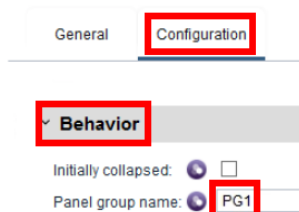


9. Click the panel again and click the gear icon that appears at the bottom left of the section to open its properties.



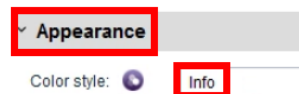
10. Click the **Configuration** tab, expand **Behavior** and set the **Panel group name** to PG1.

Properties

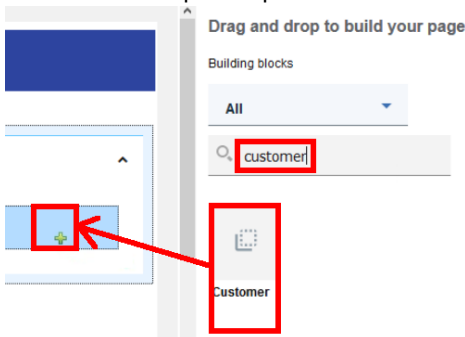


This allow us later to add additional panels to the same group and create an accordion where only one panel is expanded at a time.

11. Expand **Appearance** and set the **Color style** to **Info**.



12. Click **OK** and test the collapsible panel by clicking it a few times to expand and collapse.
13. Leave the panel expanded, search the right side for `customer` and click and drag the **Customer** view inside the collapsible panel.



14. In the **Data association** dialog that appears, leave the default which creates a new variable named **customer**, and then click **OK**.

Data association

Data mapping
This mapping links the component to a new or existing variable so you can reference the data later.

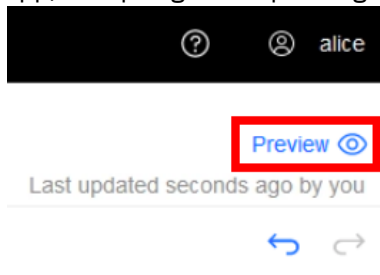
Select existing

New variable name

customer

Note the Customer view from the toolkit is displayed and can now hold data from our app's new customer variable. Let's preview our app!

15. In the upper-right, click **Preview** to deploy and run the current version of our app in the playback application engine. Wait a few seconds for a new browser window to appear and you can try out the app, collapsing and expanding the panel and entering data.

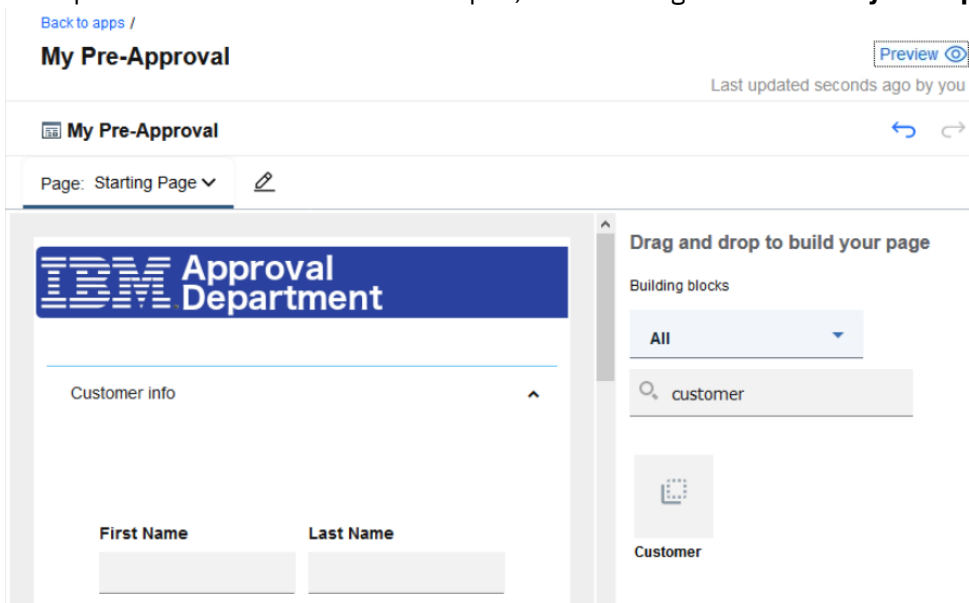


Congratulations, you have a working business app!

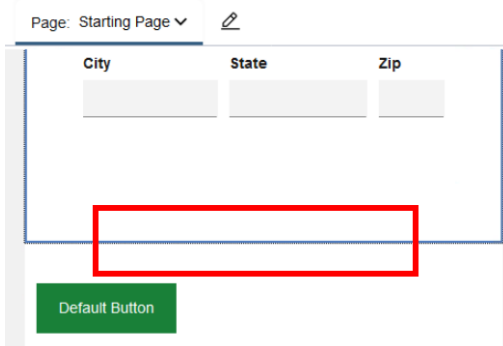
4.2 Finish the Starting Page

Let's finish the starting page and also integrate to two of our Cloud Pak for Automation capabilities: Content (FileNet) and Decisions (ODM).

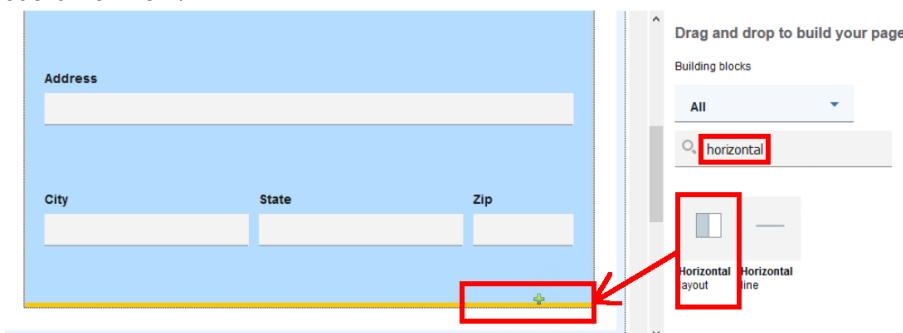
1. If the preview browser window is still open, close it and go back to the **My Pre-Approval** app editor.



Make sure the **Customer info** collapsible panel is expanded and scroll to the bottom.



- Note, you can also add simple views to your page that do not exist in a toolkit, let's try that now.
2. Search on the right for a **horizontal layout** and drag it within the collapsible panel and below the customer view.



3. Search on the right for a **button** and drag it within the new horizontal section.

Note: buttons show the Next step dialog to choose what will happen when it is clicked.

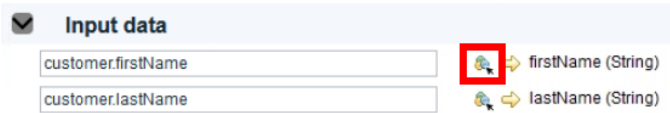
- Across from **Call an action**, click the **Select** button and select **getCustomerID** from the list of actions.

Next step



Note: we must map the data this action needs from our app's variables.

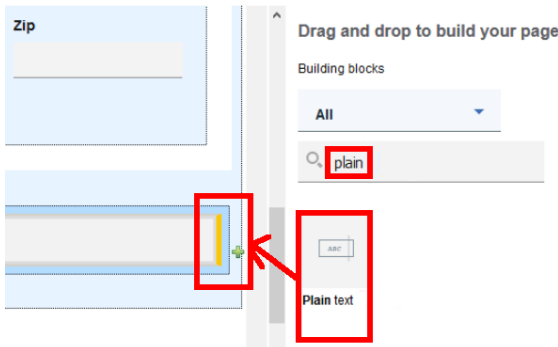
- For **Input data**, click the button to the right of each input, expand customer and select the correct variable to map.



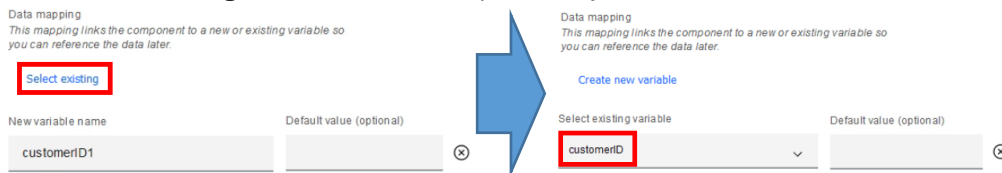
- For **Output data**, click the button and then click **New....**



- For **Go to page**, leave the default **<Stay on page>** as we don't want to change the page but just refresh the data.
- Click **OK**.
- Next, search on the right for a **plain text** and drag it within the new horizontal section to the right of the new button.



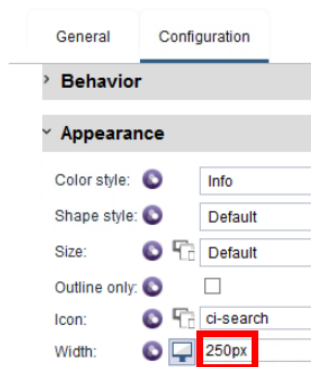
- Set the **Label** to **Customer ID**
- Click **Select existing** and then select the previously created **customerID**.



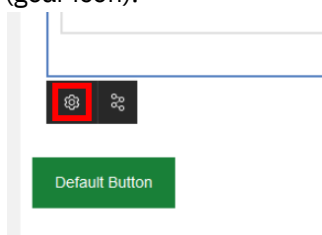
- Click **OK**.
- Click the button and select the pencil to rename it **Lookup Customer ID**.
- Click the button again and select the picture icon furthest to the right to change the icon. Try searching for **search** and choose your preferred icon for the button.

15. Click the button again and click the gear icon to open the Configuration to access more advanced settings. Expand **Appearance** and try any setting changes you wish, such as editing **Width** to **250px** so that the button will be about correct for the text.

Properties

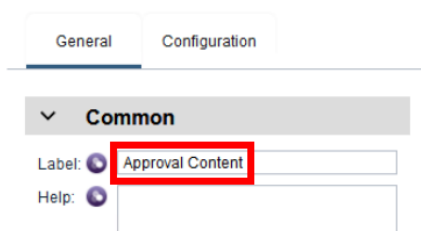


16. Click **OK**, and our first collapsible section is complete.
17. Collapse the **Customer info** panel to make some room, search the right side for another **collapsible panel** and drag it below **Customer Info**.
18. Name the new panel **Documents**.
19. Open the properties (the gear icon) and change the following:
- Behavior: **Initially collapsed** checked and **Panel group name** to PG1
 - Appearance: **Color style** to **Success**.
20. Expand the **Documents** panel, then search on the right for **Approval Content** and drag inside the **Documents** panel.
21. In **Data association**, create a new variable named **document**.
22. Scroll to the bottom of the new Approval Content view, click to select the view and open the Properties (gear icon).



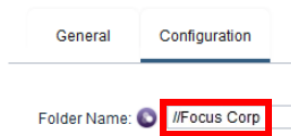
23. On the **General** tab, confirm you correctly opened the **Properties** for the **Approval Content** view.

Properties



24. On the **Configuration** tab, enter the following for the **Folder Name** so the view is filtered to the desired folder in the content repository: `//Focus Corp`

Properties



The screenshot shows a 'Properties' dialog box with two tabs: 'General' and 'Configuration'. The 'Configuration' tab is active. Below the tabs, there is a 'Folder Name' label followed by a text input field. The input field contains the text '//Focus Corp' and is highlighted with a red rectangular box.

25. Click **OK**.

Note: Now that you have used the editor a few times, the directions will be brief. Feel free to scroll up if and review some of the previous screenshots for examples if you are unsure of any action.

26. Collapse the **Documents** panel to make room, search the right side for another **collapsible panel** and drag it below **Documents**.
27. Name the new panel `Approval Request`.
28. Open the properties (the gear icon) and change the following:
- Behavior: **Initially collapsed** checked and **Panel group name** to `PG1`
 - Appearance: **Color style** to **Warning**.
29. Expand the **Approval Request** panel, then search on the right for **Decimal** and drag inside the **Approval Request** panel.
30. In Data association, set the **Label** to `Amount` and create a new variable named `amount` with no default value.
31. Click **OK**.
32. Open the properties (the gear icon) and change the following and Behavior:
- Decimal Places** to **2**
 - Currency** to a currency of your choice
33. Click **OK**.
34. Scroll to the bottom, click the **Default Button** and make the following edits:
- Next step (two bars with arrow):
 - Across from **Call an action**, click the **Select** button and select **Determine Pre-Approval** from the list of actions.
 - Map the first input data to **amount** and the second to **customerID**.
 - For the output, create a new variable named **approved**.
 - For **Go to page**, select **New page** and name it **Results**.
 - Change label (pencil): Set to **Submit**.
 - Set the following to your preference: Select color (paint bucket), Select size (two boxes), Select icon (image).

35. In the upper-right, click **Preview** to deploy and run the current version of our app in the playback application engine. Wait a few seconds for a new browser window to appear and you can try out the app.

- a. First, note that if the preview window is wide, the address has multiple fields per line:

IBM Approval Department

Customer info ^

First Name Last Name

Address

City State Zip

0

Q Lookup Customer ID Customer ID

- b. Whereas, if the preview window is smaller, the address fields are responsive and will move to be vertical.

IBM Approval Department

Customer info ^

First Name Last Name

Address

City

State

Zip

0

Q Lookup Customer ID Customer ID

- c. Enter `Alice` for the **First Name** and `User` for the **Last Name**.
- d. Click the **Lookup Customer ID** button and see the field automatically set to `42`.
- e. Enter any other name and the value will be set to `NEW`.

- f. Expand Documents and see the document list

Name	Size	Modified by	Last modified
Approvals		adam	04/12/2020
Customer		p8admin	01/10/2020
Human Resources		p8admin	01/10/2020
Invoices		p8admin	01/10/2020
Job Quotes		p8admin	01/10/2020
Legal Review		p8admin	01/10/2020

- Click the **Approvals** folder at the top
 - Click the plus sign and **Add Document**
 - Click **File name** and select a file from the **Documents** folder
 - Click **Add**.
 - Click the name of the file to see the properties on the right.
- g. Expand **Approval Request** and enter a value in the **Amount** field and press TAB to see the formatting automatically added.

Amount

\$100.00

Submit

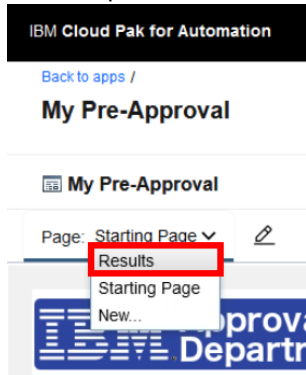
- Click **Submit** button and confirm page changes to blank Results page.
- Close the preview window to go back to Studio.

Congratulations, the starting page of your app is complete!

4.3 Create the Results and Onboarding Started Pages

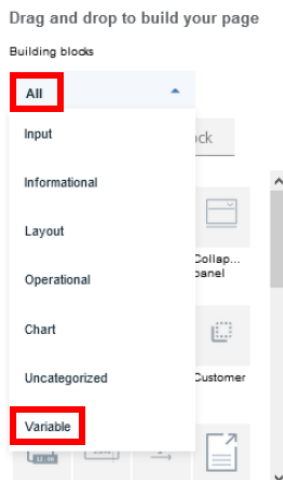
Now that we have our starting page is complete and integrated with Content Services (FileNet) and Decisions (ODM), we must create two more simple pages to show the results of the decision and launch the process in Workflow (BAW).

1. At the top of the editor, under **My Pre-Approval**, click the **Starting Page** drop down and select **Results**.

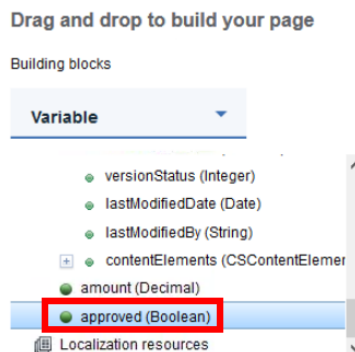


Note: the Results page was automatically created when setting the Next step dialog for the Submit button on the first page.

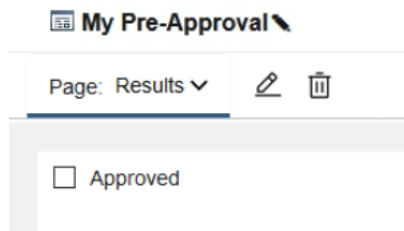
2. On the right, select the **All** drop down and choose **Variable**.



3. Scroll down and drag the **approved** variable to the top **Content box**.

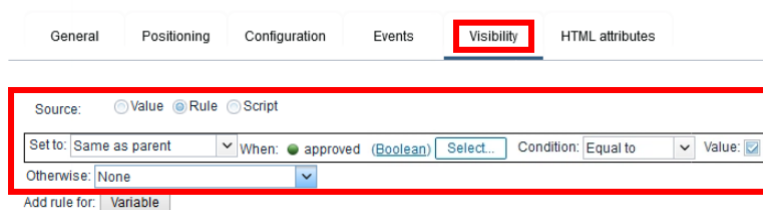


4. If you like the resulting checkbox, move forward. Alternatively, you can edit it.

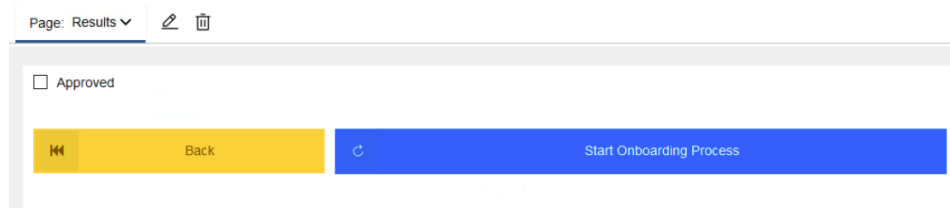


5. On the right, select the **Variable** drop down and choose **All** again, then search for a **Horizontal layout** and add it below the approved variable.
 6. On the right, search for **button** and add two buttons in the new horizontal layout.
 7. For the first button:
 - a. Next step: Do not select any action and set **Go to page** to the **Starting Page**.
 - b. Rename the button to **Back**
 - c. Change the color, size and icon to your preference.
 8. For the second button:
 - a. Next step:
 - i. Across from **Call an action**, click the **Select** button and select **Onboard Customer**.
 - ii. The input data should be automatically mapped.
 - iii. For **Go to page**, select **New page** and name it **Onboarding Started**.
 - b. Rename the button to **Start Onboarding Process**
 - c. Change the color, size and icon to your preference.
- Note: If the approved checkbox is not checked, then we do not want to show the Start Onboarding Process button and this can be achieved using conditional visibility. This is a bit advanced but is accessible from the Advanced menus if you wish to do it.
- d. Optional: click **alice** in the upper right, select **Preferences**, change the **View Mode** to **Advanced** and click **Save**.
 - e. Optional: click the **Start Onboarding Process** button and open the **Properties** (gear), click **Visibility** and enter a rule as pictured below.

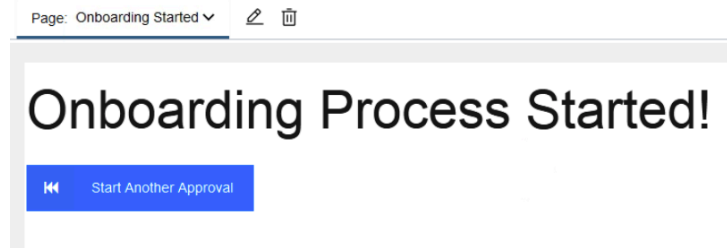
Properties



- f. Optional: Click **OK** when done and then change alice's **Preferences** back to **Basic View Mode**.



9. At the top of the editor, under **My Pre-Approval**, click the **Results** drop down and select **Onboarding Started**.
10. On the right, search for **Display text** and drag it to the page.
11. Set the name of the display text to `Onboarding Process Started!` and set the size to your preference.
12. On the right, search for **button** and add a button below the new display text and set as follows:
 - a. Next step: Do not select any action and set **Go to page** to the **<End application>**.
 - b. Rename the button to `Start Another Approval`.
 - c. Change the color, size and icon to your preference.

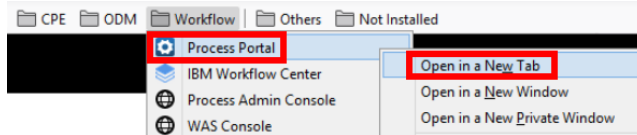


Congratulations, your app is now complete!

4.4 Preview the Completed App

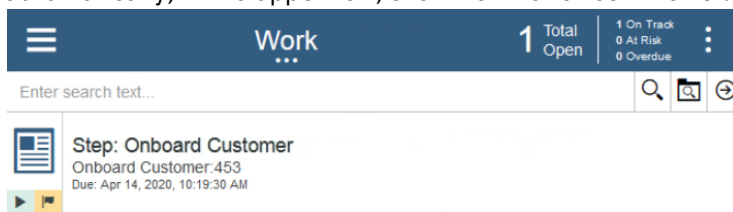
You are now ready to preview the entire app. Before we do, let's open Workflow's Process Portal so that we can confirm the process is launched.

1. On the bookmark bar, open the following in a new browser tab: **Workflow -> Process Portal**.



Note: The first time Process Portal loads after the server starts it may take a long time to load, please give it at least 1 or 2 minutes.

2. Once the **Process Portal** loads as pictured above, leave this tab open and go back to the **Studio** tab.
3. In the upper-right, click **Preview**.
4. Expand the first panel and enter `Alice` for the **First Name** and `User` for the **Last Name**.
5. Click the **Lookup Customer ID** button and see the field automatically set to `42`.
6. Make sure to leave `Alice`, `User` and `42` as the values above for the decision to work
7. Expand **Documents** and try based on preference.
8. Expand **Approval Request** and enter `1000` in the **Amount** field and click **Submit**.
9. Confirm the **Approved** field is checked (the decision worked).
10. Click the **Start Onboarding Process** button and wait for the final page to appear.
11. Switch to the **Process Portal** browser tab and see the new task appear. If the task does not appear automatically, in the upper-left, click **Work** to refresh the list.



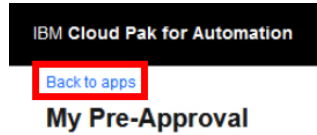
12. Click the name of the task, **Step: Onboard Customer**, claim it and wait for the UI to appear where you can see the data passed from the app to the workflow, then complete the task.

Note: As before, the first time this task type loads after the server starts it may take a long time to load.

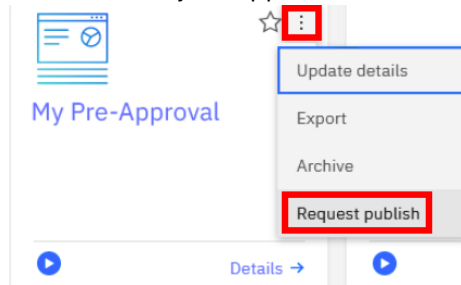
Note: This is a placeholder onboarding process and contains only one task.

13. Switch back to the **Studio** browser tab.

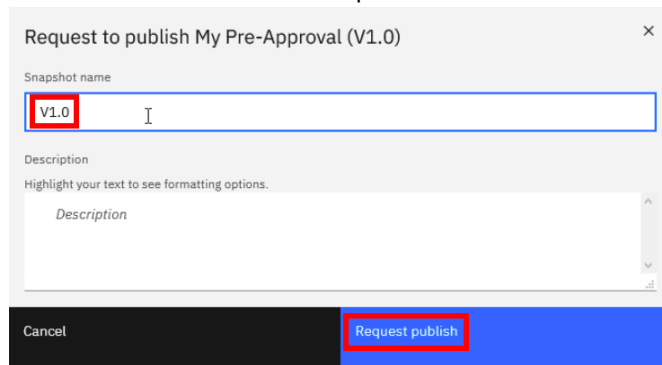
14. At the upper-left, click **Back to apps**.



15. On the tile for your app, click the three-dot menu in the upper-right and select **Request publish**.



16. Enter a name for the new snapshot such as v1.0 and click **Request publish**.



Congratulations, you just successfully tested your first business app and requested the IT team publish it!

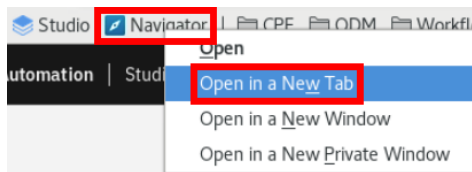
5 Deploy and Run the App

Now that our app is complete, the IT Administrator can deploy it from Studio to Navigator for end users to access and use.

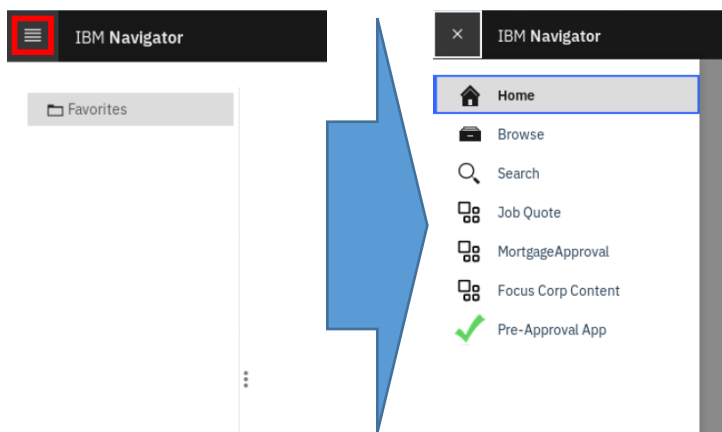
5.1 Tour Navigator

Let's take a look at the Business Automation Navigator interface, the unified user experience for end users of the Cloud Pak for Automation. Previously known as Content Navigator within FileNet, Business Automation Navigator support additional capabilities from across the Cloud Pak for Automation such as Applications. The app you built is deployed as a feature within Navigator.

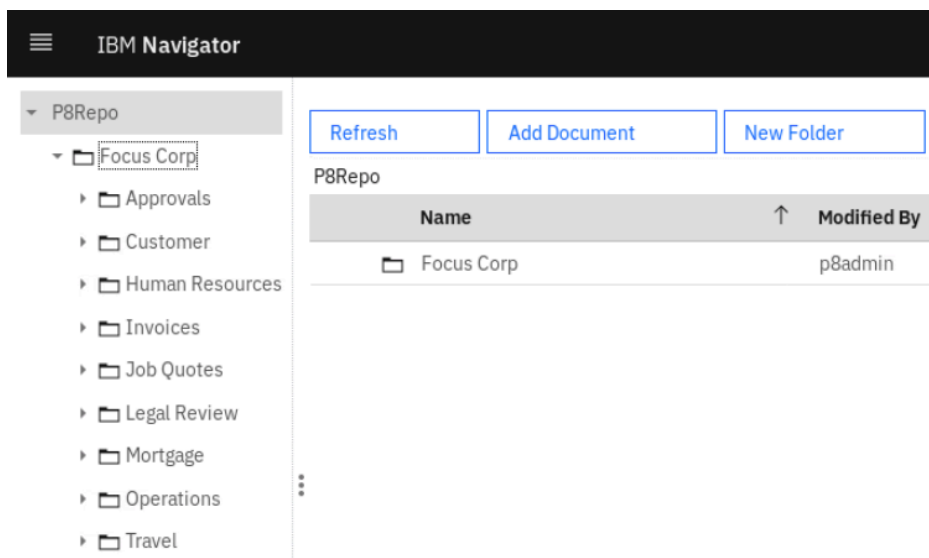
1. On the bookmark bar, open **Navigator** in a new browser tab.



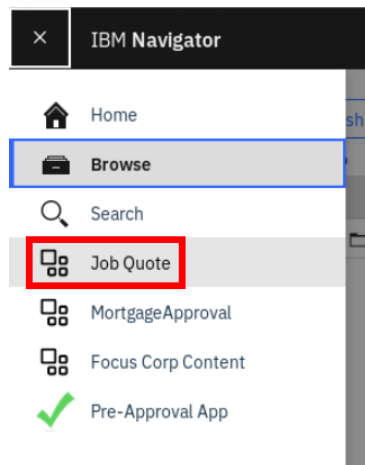
2. Click the three-bar menu at the upper-left and see the available features listed for this Navigator desktop (your list may be different than pictured below).



3. Select **Browse** to see the list of folders in FileNet and expand the **Focus Corp** folder.



- Click the three-bar menu at the upper-left and select a sample app such as **Job Quote**.



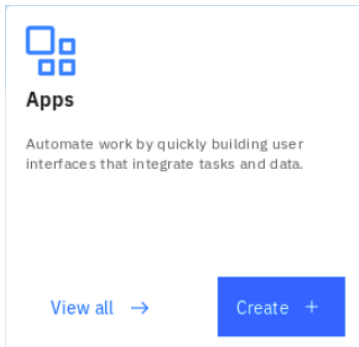
- Fill in some values and try the app.

The screenshot displays the 'DL Flooring' application interface. The header features the 'DL Flooring' logo and a navigation menu. The main content area contains several input fields and a map. The 'State' field is set to 'CA', the 'City' field is set to 'San Francisco', and the 'Postal Code' field is set to '94105'. The 'Flooring Type' section has three radio buttons: 'Hardwood' (selected), 'Tile', and 'Carpet'. The 'Square Footage' field is set to '1,000' and the 'Job Quote' field is set to '6,000'. A green button labeled '\$ Get Quote' is located at the bottom. A map of San Francisco is shown on the right side of the form, with a location pin indicating the selected address.

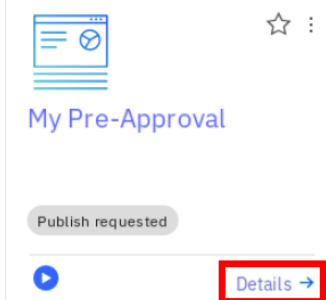
5.2 Deploy the App

Now that we know Navigator, it is time for the IT Administrator to deploy our new app.

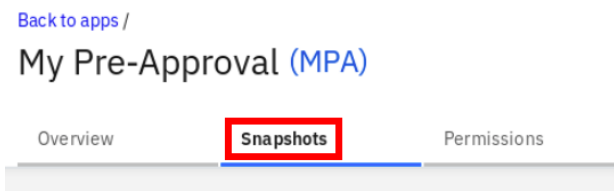
1. Scroll down and click on the **Apps** tile.



2. Locate the tile for your app that shows a **Publish requested** status and click the **Details** link.



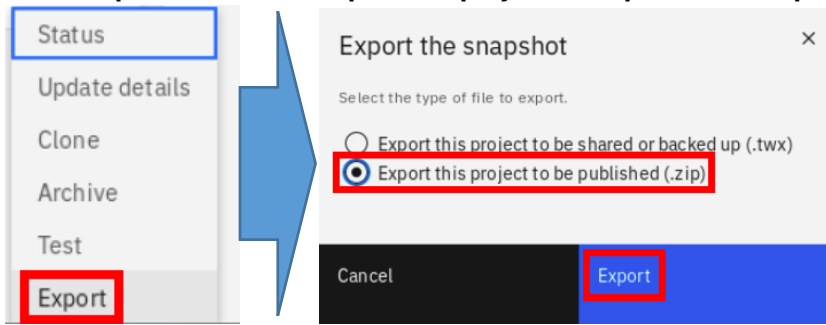
3. Select the **Snapshots** tab.



4. Locate the snapshot that has **Publish requested** listed, follow that row to the right and click on the three-dot menu for that row.

Name	Status	Created	Last updated
→ Current		alice 4/13/2020, 11:29:14 PM	alice 4/14/2020, 2:25:36 AM
→ V1.0 (V1.0)	Publish requested	alice 4/14/2020, 2:25:36 AM	alice 4/14/2020, 2:25:37 AM

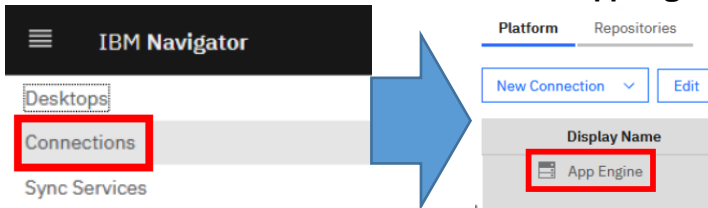
5. Select **Export** and choose **Export this project to be published (.zip)** and click **Export**.



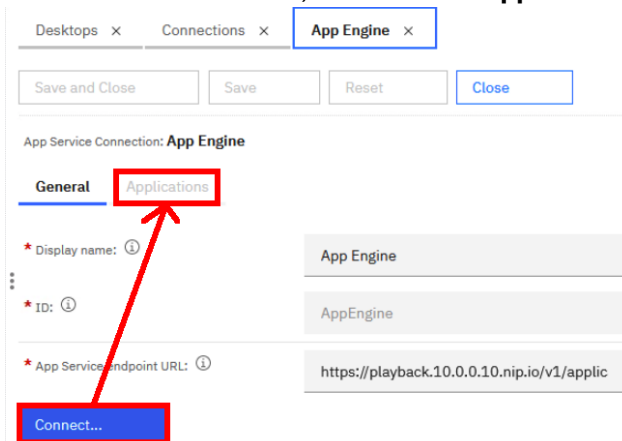
6. Choose a location to save the file (such as Downloads or Desktop).
 7. To be certain all systems are logged out, close the **Firefox** browser completely, all tabs and windows.
 8. Open a new **Firefox** browser, go to the **Navigator** bookmark and log in as **adam / passwOrd** (who has administrator permission).
 9. Click the three-bar menu at the upper-left and select **Administration** (only adam has access so if you do not see it make sure all browser windows are closed and opening a new one to Navigator).



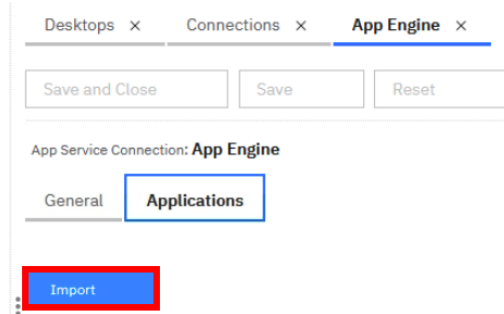
10. On the left click **Connections**, then double click **App Engine**.



11. Click the **Connect** button, then click the **Applications** tab.



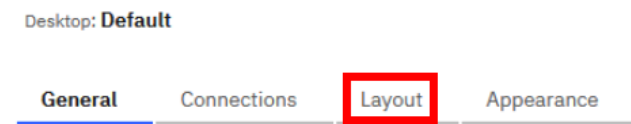
12. Click the **Import** button, locate the file exported from Studio and open it. After a few seconds, the app is imported and available to be added to a desktop.



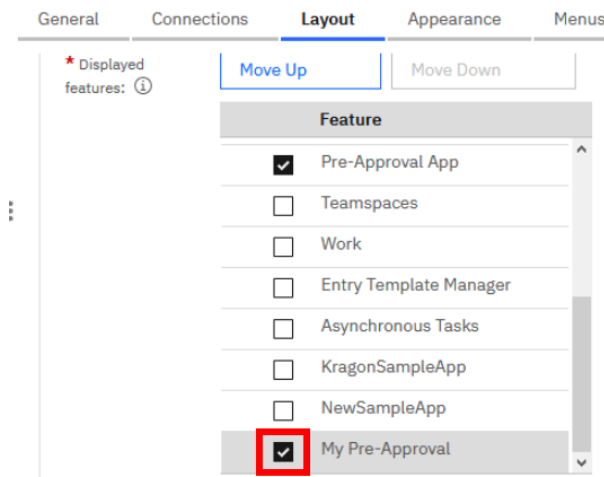
13. On the left, click **Desktops**, then double click the **Default** desktop to open it.



14. Wait a few seconds for the line to appear below **Layout** and then click to open the tab.



15. Scroll to the **Displayed features** section, locate your app and select the checkbox to add it to the desktop's features.



16. At the top, click **Save**.

17. Refresh the Navigator browser tab to reload the new desktop configuration.

Congratulations, the IT Administrator successfully deployed your first business app to Navigator!

5.3 Run the App in Navigator

The app is now deployed and you available in Navigator to end users. When accessing the app, it will appear very similar to the Preview in Studio.

IBM Navigator

IBM Approval Department

Customer info

First Name Last Name

Address

City State Zip

Lookup Customer ID Customer ID

Documents

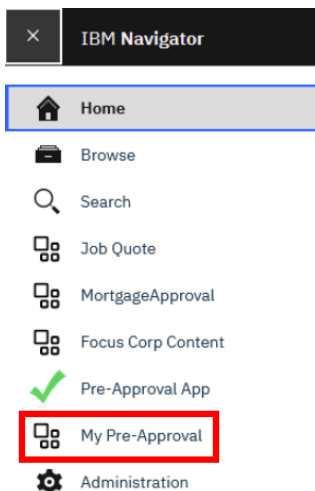
Approval Request

Submit

©IBM, 2020

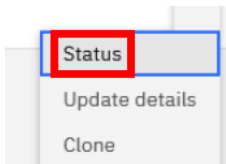
For these steps, we will again become a business user. You should already have a Process Portal tab open in your browser.

1. Make sure you refreshed the browser after configuring the Desktop features before continuing.
2. Click the three-bar menu at the upper-left and select the name of your business app: **My Pre-Approval**.

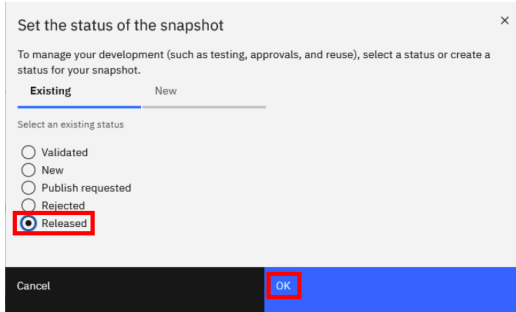


3. Enter Alice for the First Name and User for the Last Name.
4. Click the **Lookup Customer ID** button and see the field automatically set to 42. Make sure to leave Alice and 42 as the values above for the decision to work.
5. Expand **Documents** and try based on preference.
6. Expand **Approval Request** and enter 1000 in the **Amount** field and click **Submit**.

7. Confirm the **Approved** field is checked (the decision worked).
8. Click the **Start Onboarding Process** button and wait for the final page to appear.
9. Switch to the **Process Portal** browser tab (or open a new one) and see the new task appear.
10. If prefer like, click the name of the task, claim it and wait for the UI to appear where you can see the data passed from the app to the workflow and complete the task. If the task does not appear automatically, in the upper-left, click Work to refresh the list.
11. Switch back to the **Studio** browser tab (or open a new one).
12. On the **Snapshots** tab of the **My Pre-Approval** app and locate the snapshot that has **Publish requested** listed.
13. Follow that row to the right, click on the three-dot menu for that row and select **Status**.



14. Set the status to **Released** and then click **OK**.



Congratulations, you successfully deployed and ran your first business app!

6 Conclusion and Next Steps

Congratulations! You successfully reviewed the available toolkits and templates in Studio, created a new business app from a template, continuously validated the new business app through previews, deployed that business app and ran it in Navigator.

If you would like to experience more, feel free to use the remaining time to edit or run some of the other samples on the system. You may also wish to create a new toolkit, template or app of your own design.

Thank you for your interest in Cloud Pak for Automation.